

REMARKS

Claims 1-8, as amended, remain pending herein.

The claim amendments are supported by disclosure throughout Applicant's specification and drawings.

1. The figure submitted with the July 19, 2006 Amendment was objected to under 35 U.S.C. §132(a) as allegedly introducing new matter into the disclosure. As discussed with the Examiner by telephone, Applicant never intended the figure to be an additional drawing as a formal part of the application, but rather, as explanatory support of patentability. Applicant respectfully requests that the previous figure be canceled and submit herewith, a figure labeled "Explanation in Support of Patentability." Applicant respectfully requests withdrawal of this ground of rejection.

2. Claim 1 was rejected under 35 U.S.C. §112, first paragraph, the Office Action contending that the specification referred to raw material on the outside and that the term "inner circumferential wall" is allegedly new matter. That view misunderstands Applicant's disclosure. Raw material is shown, for example, in Figures 1(a) and 1(b) as a fired outer layer 3 over an inner circumferential wall 6 (delineated, for example, by the dotted line shown in Fig 1(a)). In addition, Applicant has now amended the specification to clarify that the disclosed honeycomb structure includes a first inner circumferential wall 6 and a second outer circumferential wall 3, thereby mooting this rejection.

Applicant respectfully requests withdrawal of this ground of rejection.

3. Claims 1-2, 4-6 and 8 were rejected under 35 U.S.C. §102(b) over Kotani U.S. Patent 5,629,067. The Office Action alleges that the “outer” is the same as “inner,” and that the raw material is on the inside.

Applicant discovered, *inter alia*, a ceramic honeycomb structure comprising a first circumferential wall, a plurality of through-holes surrounded by partition walls, and a second, outer circumferential wall obtained by firing a layer of a raw material applied to the first circumferential wall of the ceramic honeycomb structure (see amended claim 1). The thermal expansion coefficient of the second, outer circumferential wall is larger than a thermal expansion coefficient of the first circumferential wall, for applying compressive force in a direction of a diameter of the honeycomb structure to an inside partition wall (see amended claim 1). A larger thermal expansion coefficient (TEC) provides a compressive stress to the inner wall portions (see attached Explanation in Support of Patentability).

Kotani describes a structure including a honeycomb body and an outer coating having a “same degree of thermal expansion” (see col. 7, lines 15-16), or a “lower thermal expansion of the outer coating...for effectively preventing cracks and other defects in the outer coating” (see col. 7, lines 27-28).

Kotani does not describe a first and second circumferential wall, let alone a second, outer circumferential wall having a higher thermal expansion coefficient than the first circumferential wall, which results in applying a compressive force to an inside partition wall. Indeed, the lower thermal expansion of Kotani’s outer coating appears to be diametrically opposite to the desired expansion in Applicant’s claimed invention. For at least these reasons, Kotani does not disclose

all elements of Applicant's claim 1 and the claims that depend therefrom, which are therefore not anticipated by Kotani. Applicants respectfully request withdrawal of this ground of rejection.

4. Claims 1-3 and 5 were rejected under 35 U.S.C. §102(e) over Matsubara et al. U.S. Patent 6,060,148.

Matsubara describes a structure including a plurality of irregular open-ended cells at the periphery having a wall thickness greater than the cell walls elsewhere in the body.

Matsubara does not describe first and second circumferential walls, let alone a second, outer circumferential wall having a higher thermal expansion coefficient than the first circumferential wall, which results in applying a compressive force to an inside partition wall. For at least this reason, Matsubara does not disclose all elements of Applicant's claim 1 and the claims that depend therefrom, which are therefor not anticipated by Matsubara. Applicants respectfully request withdrawal of this ground of rejection.

5. Claim 7 was rejected under 35 U.S.C. §103(a) over Kotani.

Claim 7 depends from claim 1. Kotani does not teach or suggest a first and second circumferential wall, let alone a second, outer circumferential wall having a higher thermal expansion coefficient than the first circumferential wall, which results in applying a compressive force to an inside partition wall. Instead, Kotani teaches away from the claimed structure by teaching a structure having a "same degree of thermal expansion" (see col. 7, lines 15-16), or a "lower thermal expansion of the outer coating...for effectively preventing cracks and other defects in the outer coating" (see col. 7, lines 27-28; emphasis added here). Nowhere does Kotani disclose or suggest the use of a second, outer wall having a higher TEC.

There is no disclosure or teaching in Kotani which would have suggested Applicant's claimed invention to one of ordinary skill in this art, nor is there any suggestion in Kotani to modify its disclosure to render obvious Applicant's claimed invention. Reconsideration and withdrawal of these rejections are respectfully requested.

6. Claim 3 was rejected under 35 U.S.C. §103(a) over Kotani in further view of Beauseigneur et al. U.S. Patent 5,346,722.

Kotani has been distinguished above herein. Beauseigneur fails to supply the omissions of Kotani. Beauseigneur teaches a method of producing a washcoated substrate including introducing a buffer solution into micropores. Beauseigneur does not teach or suggest a second, outer circumferential wall having a higher thermal expansion coefficient than the first circumferential wall, which results in applying a compressive force to an inside partition wall.

There is no disclosure or suggestion of Applicant's claimed invention in either Beauseigneur or Kotani. Nor is there any suggestion of desirability of combining any portions thereof that would allow a person having ordinary skill in the art to arrive at Applicant's claimed structure. There is no motivation to combine the teachings of Kotani with the method of Beauseigneur.

Accordingly, claim 1 and the claims that depend therefrom are patentably non-obvious over the cited references. Applicant respectfully requests withdrawal of this ground of rejection.

Serial No.: 09/803,941
Docket No.: 28953.7210

For the foregoing amendments and reasons, the application is now fully in condition for allowance, and a notice to that effect is respectfully requested. The PTO is hereby authorized to charge/credit any fee deficiencies or overpayments to Deposit Account No. 19-4293 (Order No. 28953.7210).

If further amendments would place this application in even better condition for issue, the Examiner is invited to call Applicant's undersigned attorney at the number listed below.

Respectfully submitted,

STEPTOE & JOHNSON LLP

A handwritten signature in black ink, appearing to read "Roger W. Parkhurst", is written over the printed name.

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Date: **June 20, 2006**

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IN THE DRAWINGS:

Please cancel the alleged drawing filed with the amendment on July 19, 2005.